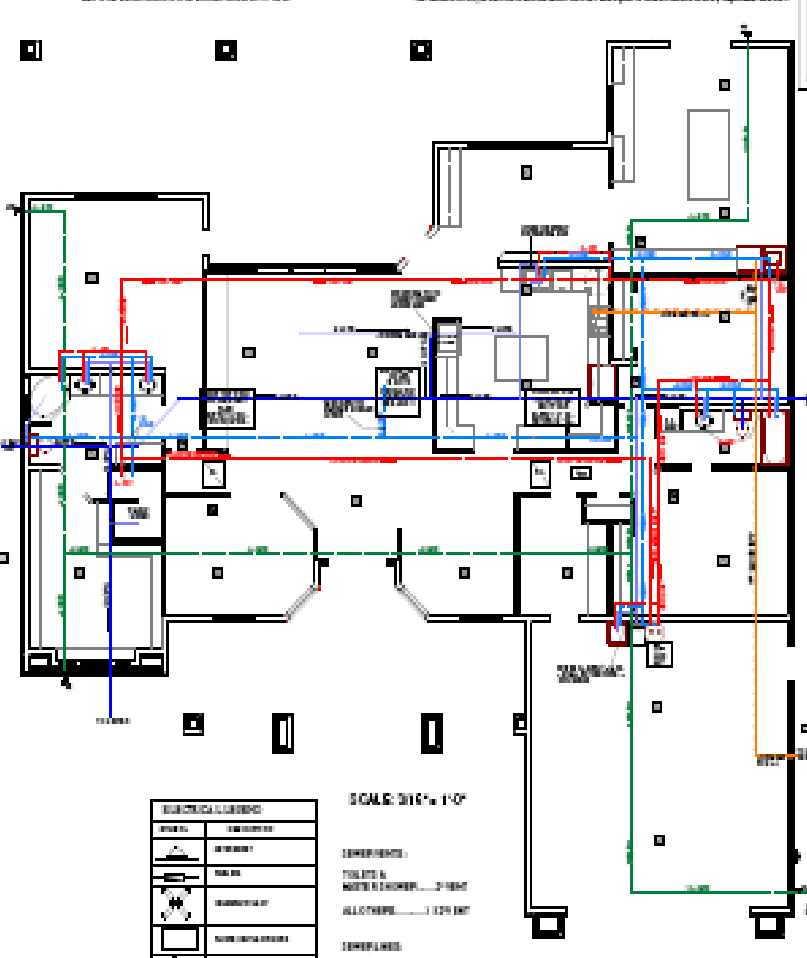


# **Electrical Plans & Symbols**

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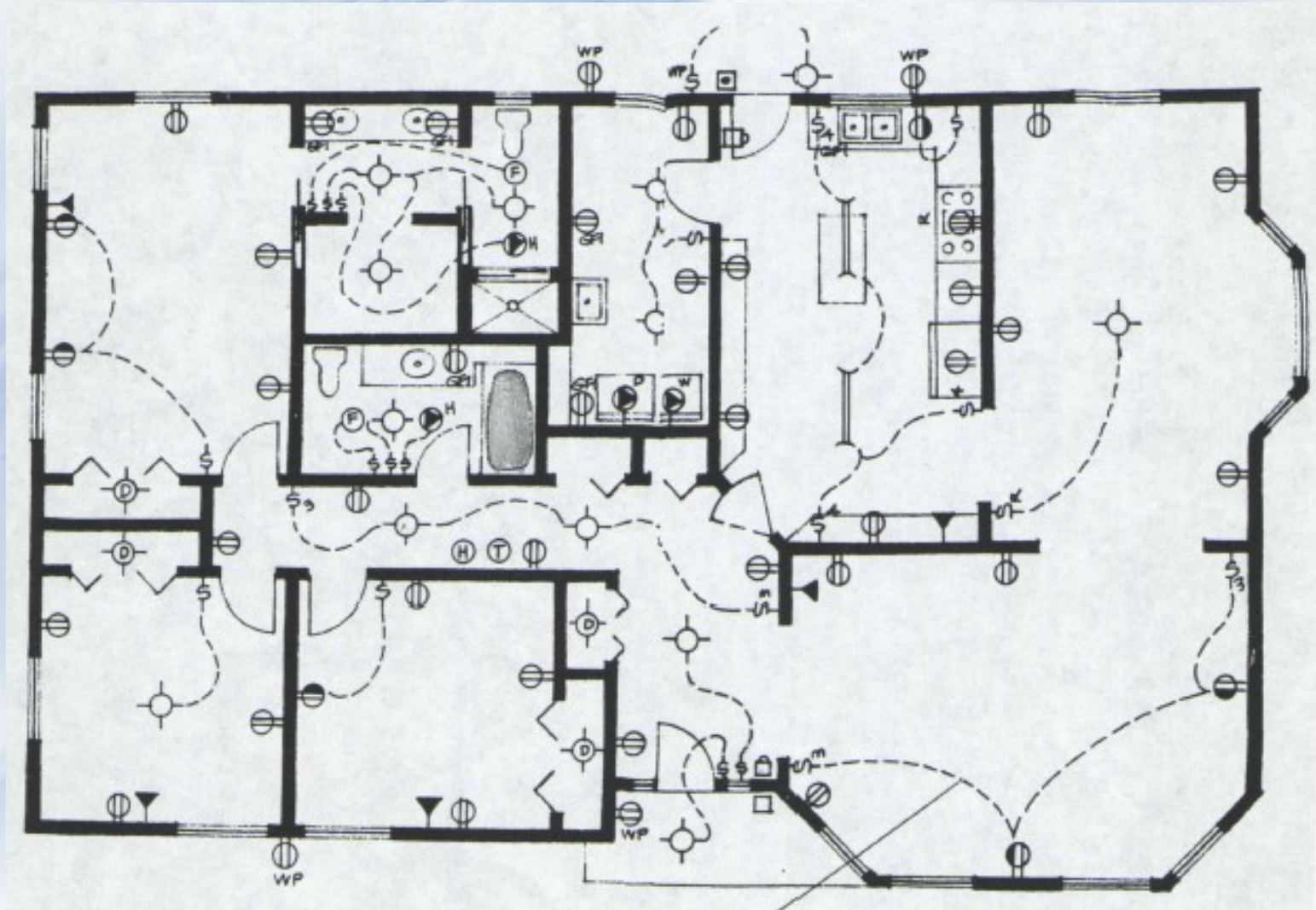
**MECHANICAL LOCKING SYSTEM:**  
LOCKING LATCH MECHANISM, LOCKING PIN SYSTEM  
FORWARD/REVERSE AND CLUTCH AND BRAKE

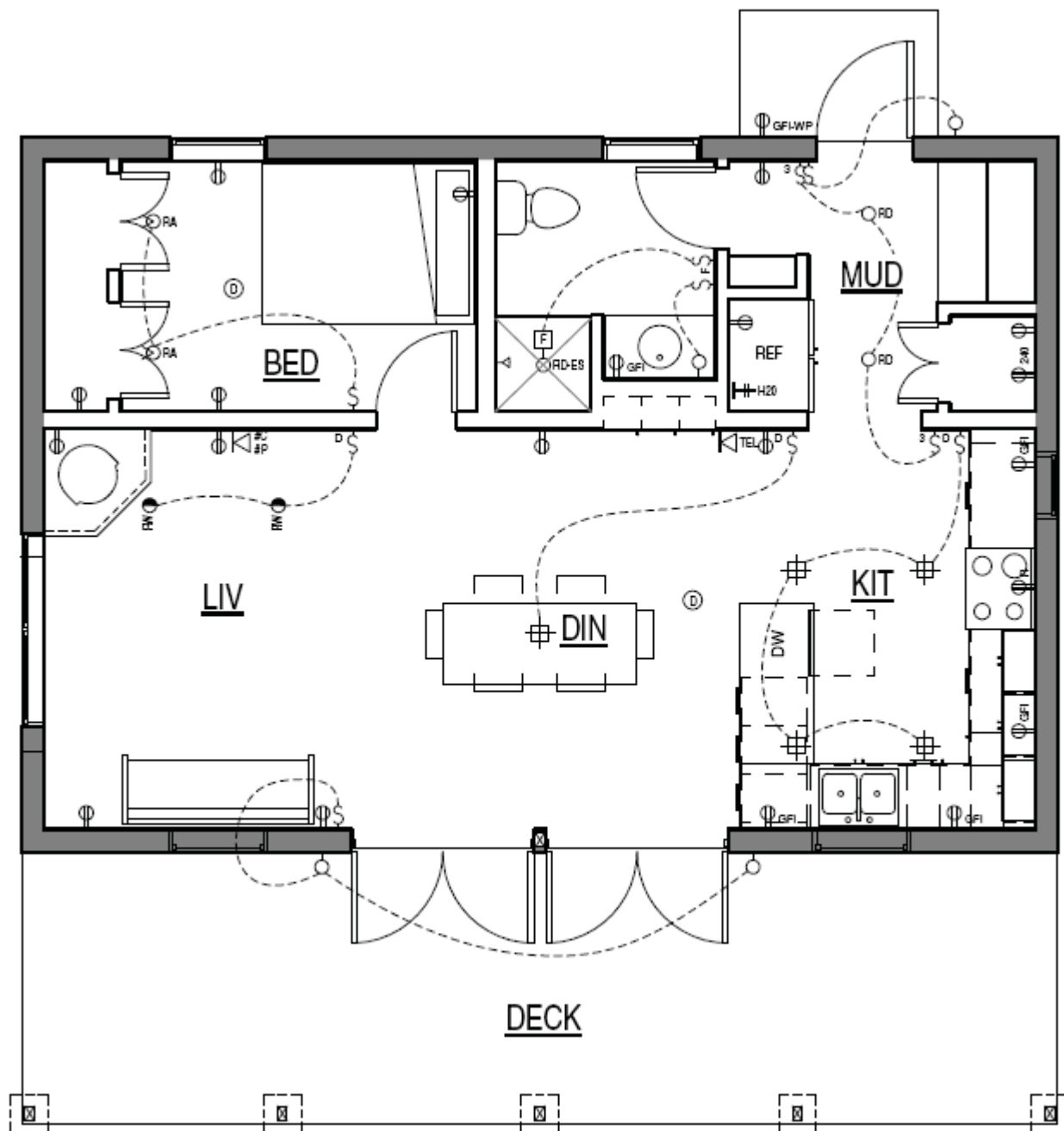
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# Electrical Symbols

- Symbols are used throughout construction industry to illustrate typical devices, equipment, fixtures, and other related items.
- Many projects require engineers and architects to create non-typical symbols relating to job conditions.
- Common symbol knowledge is essential in reading blueprints.
- Symbols are fairly typical, but each architect may have varying styles.

# Electrical Symbols









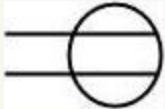
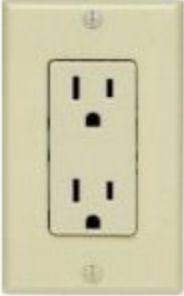



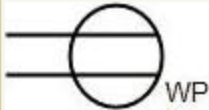

# Electrical Symbols

## Electrical Panel

Electrical Panel			<p>The notes may or may not specify an electrical panel (load center) manufacture and/or the number of circuits. In many cases it is left to the discretion of the electrical contractor. It is expected that the electrical contractor will provide the correct amount of circuits to meet the local building codes.</p>
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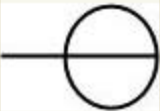

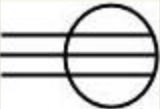

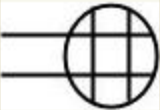

# Electrical Symbols

## Outlets/Receptacles

Receptacle (Outlet) - Duplex			The style, possibly model numbers, and color of the receptacles will be in the notes on the plans.
Receptacle (Outlet) - Duplex - One Switched			
Receptacle (Outlet) - Duplex - GFCI			The style, possibly model numbers, and color of the GFCI receptacles will be in the notes on the plans.
Receptacle (Outlet) - Duplex - Waterproof			The receptacle is not actually waterproof, it is the cover that provides the protection from the elements.

# Electrical Symbols

## Outlets/Receptacles

Receptacle (Outlet) - Single			The receptacle shown is specifically made for clocks. By having the socket recessed in the outlet, the clock can sit flat against the wall. Some plans may have a "C" in the bottom right of the symbol to signify that the outlet is made for a clock.
Receptacle (Outlet) - 240 VAC			A letter may be placed on the lower right hand corner signifying what the outlet is for. As an example, "D" for dryer or "R" for range.
Receptacle (Outlet) - Quad			A quad receptacle is made up of two duplex receptacles mounted in a double electrical box.



## Technical Data

# Electrical Symbols and Abbreviations

*In Accordance with American National Standards Institute*

### General Outlets









#### Ceiling Wall

○	-○	Lighting Outlet
Ⓟ	-Ⓟ	Blanked outlet
ⓓ		Deep cord
ⓔ	-ⓔ	Electrical outlet: for use only when circle used alone might be confused with columns, plumbing symbols, etc.
ⓕ	-ⓕ	Fan outlet
ⓙ	-ⓙ	Junction box
Ⓛ	-Ⓛ	Lamp holder
Ⓛ <sub>sw</sub>	-Ⓛ <sub>sw</sub>	Lamp holder with pull switch
Ⓢ	-Ⓢ	Pull switch
Ⓥ	-Ⓥ	Outlet for vapor discharge lamp
Ⓧ	-Ⓧ	Exit light outlet
Ⓢ	-Ⓢ	Clock outlet (specify voltage)

## Technical Data

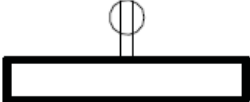






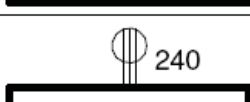

# Electrical Symbols and Abbreviations

*In Accordance with American National Standards Institute*

Convenience Outlets	
	Duplex convenience outlet
	Convenience outlet other than duplex 1-single, 3-triplex, etc.
	Weatherproof convenience outlet
	Range outlet
	Switch and convenience outlet
	Radio and convenience outlet
	Special purpose outlet (Des. in Spec.)
	Floor outlet

# Electrical Symbols

## Outlets/ Receptacles

	110V RECEPTICAL
	SWITCH RECEPTICAL
	GROUND FAULT CURRENT INTERRUPTER RECEPTACLE
	GFI AND WATER PROOF RECEPTACLE
	MICROWAVE OVEN RECEPTICAL
	RANGE RECEPTICAL
	UNDER COUNTER RECEPTICAL
	240V RECEPTICAL
	110V FLOOR RECEPTICAL

# Electrical Symbols

## Switches

Switch	S		The style, possibly model numbers, and color of the switches will be in the notes on the plans.
Switch - 3 Way	S <sub>3</sub>		
Switch - 4 Way	S <sub>4</sub>		
Switch - Dimmer	S <sub>DM</sub>		The style, possibly model numbers, and color of the dimmers will be in the notes on the plans.
Switch - Dimmer - 3 Way	S <sub>3DM</sub>		

## Technical Data

# Electrical Symbols and Abbreviations

*In Accordance with American National Standards Institute*

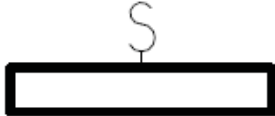
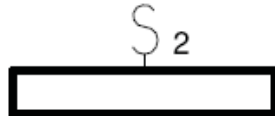
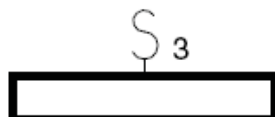
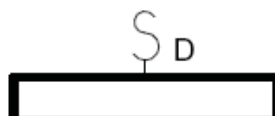
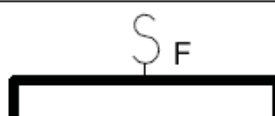



### Switch Outlets

S	Single pole switch
S <sub>2</sub>	Double pole switch
S <sub>3</sub>	Three way switch
S <sub>4</sub>	Four way switch
S <sub>D</sub>	Automatic door switch
S <sub>E</sub>	Electrolier switch
S <sub>K</sub>	Key operated switch
S <sub>P</sub>	Switch and pilot lamp
S <sub>CB</sub>	Circuit breaker switch
S <sub>WCB</sub>	Weatherproof circuit breaker
S <sub>MC</sub>	Momentary contact switch
S <sub>RC</sub>	Remote control switch
S <sub>WP</sub>	Weatherproof switch
S <sub>F</sub>	Fused switch
S <sub>WF</sub>	Weatherproof fused switch



# Electrical Symbols

## Switches

	LIGHT SWITCH
	DOUBLE LIGHT SWITCH
	3-WAY LIGHT SWITCH
	DIMMER LIGHT SWITCH
	OCCUPANCY SENSOR FAN SWITCH
	KEY ROOM MASTER CONTROL
	KEY SCENE MASTER CONTROL
	GRAPHIC EYE





# Electrical Symbols

## Fixtures/Lights

Device Name	Device Symbol	Device Picture	Comment
Light Fixture - Wall Mounted			The symbol does not indicate the type of fixture. The symbol only tells the electrician that he must install a wall electrical box for a light fixture in that location.
Light Fixture - Ceiling Mounted			The symbol does not indicate the type of fixture. The symbol only tells the electrician that he must install a ceiling, light fixture, electrical box in that location.
Light Fixture - Pull Chain			The exact style of pull chain lamp socket is usually left to the discretion of the electrical contractor.











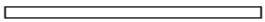
# Electrical Symbols

## Fixtures

Fluorescent Light Fixture			The number of horizontal lines between the vertical end lines, indicate the number of lamps. The notes will state the style of fixture.
Light Fixture - Recessed			The notes will specify the style and type of recessed light fixture including the trim






# Electrical Symbols

## Fixtures/Lights

 RD	RECESSED DOWN LIGHT
 RD-ES	RECESSED DOWN LIGHT ENERGY STAR RATED
 RW	RECESSED WALL WASHER
 RA	RECESSED ACCENT DIRECTIONAL
 RG	RECESSED GLASS
	CEILING BOX
 F	BATHROOM EXHAUST FAN
	WALL MOUNTED FIXTURE
	LED LINEAR
	IN-WALL LED STEP LIGHT W/ REMOTE TIMER CONTROL
	FLUORESCENT STRIP

# Electrical Symbols

## Fans

Ceiling Fan			This symbol specifies that a ceiling fan electrical box must be installed in this location. A <a href="#">ceiling fan electrical box</a> can support more weight than a light fixture electrical box.
Exhaust Fan			The notes will generally specify make and model of the exhaust fan. Exhaust fans are usually supplied by the electrical contractor who hooks up the electrics and the HVAC contractor installs the duct work.
Exhaust Fan & Light Combo			Additional information on <a href="#">exhaust fans</a>





# Electrical Symbols

## Miscellaneous

Smoke Detector			Today, most smoke detectors are combination smoke/carbon monoxide detectors.
Telephone			The notes will specify any special features with respect to the telephone outlets.








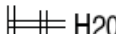
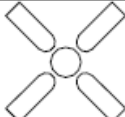
# Electrical Symbols

## Miscellaneous

Cable TV			The electrical contractor may or may not do the termination of the cable to the outlet.
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# Electrical Symbols

## Miscellaneous

	THERMOSTAT
	SMOKE & CARBON MONOXIDE DETECTOR
	NATURAL GAS/PROPANE HOOKUP
	MULTIMEDIA JACK (NETWORK/TV)
	TELEPHONE JACK
	DOOR BELL
	DOOR BELL CHIME
	ICE MAKER
	CEILING FAN

